

PTO/SB/08 (09-06)  
 Approved for use through 03/31/2007. OMB 0651-0031  
 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
 Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid  
 control number.

Substitute for form 1449/PTO  
**INFORMATION DISCLOSURE  
 STATEMENT BY APPLICANT**

Date Submitted: April 1, 2009

(use as many sheets as necessary)

**Complete if Known**

Application Number 10/677,227  
 Filing Date 10/3/2003  
 First Named Inventor Hiroaki ITO  
 Art Unit 1646  
 Examiner Name Prema Maria MERTZ  
 Attorney Docket Number 053466-0365

Sheet 1 of 3

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	E1	2002/0187150 A1	12/12/2002	Mihara et al.	
	E2	2003/0236260 A1	12/25/2003	Shimojo et al.	
	E3	2004/0115197 A1	06/17/2004	Yoshizaki et al.	
	E4	2006/0292147 A1	12/28/2006	Yoshizaki et al.	
	E5	5,210,075 A	05/11/1993	Scholz et al.	
	E6	5,670,373 A	09/23/1997	Kishimoto, Tadimitsu	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code* Number* Kind Code* (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Documents	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
	E7	EP 0 448 181 A2	09/25/1991	Gist-Brocades N.V.		
	E8	EP 0 628 639 A1	12/14/1994	Chugai Seiyaku Kabushiki Kaisha		
	E9	EP 0 785 276 A1	07/23/1997	Ajinomoto Co., Inc.		
	E10	EP 0 791 359 A1	08/27/1997	Chugai Seiyaku Kabushiki Kaisha		
	E11	WO 95/09873 A1	04/13/1995	Board of Regents, The University of Texas System		
	E12	WO 95/13086 A1	05/18/1995	Houghton Pharmaceuticals, Inc.		
	E13	WO 95/34320 A2	12/21/1995	Regents of the University of Minnesota		
	E14	WO 96/33735 A1	10/31/1996	Cell Genesys, Inc.		
	E15	WO 98/25971 A1	06/18/1998	Celltech Therapeutics Limited		
	E16	WO 98/28001 A1	07/02/1998	Advanced Biotechnology Concepts, Inc.		
	E17	WO 2004/096273 A1	11/11/2004	Chugai Seiyaku Kabushiki Kaisha		

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
--------------------	-----------------------	--	----------------

Examiner Signature	/Prema Mertz/	Date Considered	09/08/2009
--------------------	---------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3), 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language translation is attached.  
 This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		<b>Application Number</b>	10/677,227
		<b>Filing Date</b>	10/3/2003
		<b>First Named Inventor</b>	Hiroaki ITO
		<b>Art Unit</b>	1646
		<b>Examiner Name</b>	Prema Maria MERTZ
		<b>Attorney Docket Number</b>	053466-0365
Date Submitted: April 1, 2009			
(use as many sheets as necessary)			
Sheet	2	of	3

## NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	E18	Office Action in counterpart Chilean Application 1241-2004, 7 pages.	
	E19	ATREYA et al., "Blockade of interleukin 6 <i>trans</i> signaling suppresses T-cell resistance against apoptosis in chronic intestinal inflammation: Evidence in Crohn disease and experimental colitis <i>in vivo</i> ," <i>Nature Medicine</i> , May 2000, 6(5):583-588.	
	E20	GAILLARD et al., "Identification of a novel antigenic structure of the human receptor for interleukin-6 involved in the interaction with the glycoprotein 130 chain," <i>Immunology</i> , 1996, 89:135-141.	
	E21	GROTTTRUP-WOLFERS et al., "Elevated cell-associated levels of interleukin 1β and interleukin 6 in inflamed mucosa of inflammatory bowel disease," <i>European Journal of Clinical Investigation</i> , 1996, 26:115-122.	
	E22	HOLUB et al., "Increased Interleukin-6 Levels, Interleukin-6 Receptor and gp130 Expression in Peripheral Lymphocytes of Patients with Inflammatory Bowel Disease," <i>Scand. J. Gastroenterol.</i> , 1998, 33 Suppl., 223:47-50.	
	E23	ITO et al., "A Pilot Randomized Trial of a Human Anti-Interleukin-6 Receptor Monoclonal Antibody in Active Crohn's Disease," <i>Gastroenterology</i> , 2004, 126(4):989-996.	
	E24	ITO et al., "Anti-IL-6 receptor monoclonal antibody inhibits leukocyte recruitment and promotes T-cell apoptosis in a murine model of Crohn's disease," <i>J. Gastroenterol.</i> , 2002, 37(Suppl. 14):56-51.	
	E25	ITO et al., "IL-6 and Crohn's Disease," <i>Current Drug Targets - Inflammation &amp; Allergy</i> , 2003, 2(2):125-130.	
	E26	JONES et al., "Mucosal Interleukin-6 Secretion in Ulcerative Colitis," <i>Scand. J. Gastroenterol.</i> , 1994, 29:722-728.	
	E27	KALAI et al., "Analysis of the mechanism of action of anti-human interleukin-6 and anti-human interleukin-6 receptor-neutralising monoclonal antibodies," <i>Eur. J. Biochem.</i> , 1997, 249:690-700.	
	E28	KIBERD, Bryce A., "Interleukin-6 Receptor Blockage Ameliorates Murine Lupus Nephritis," <i>Journal of the American Society of Nephrology</i> , 1993, 4(1):58-61.	
	E29	KISHIMOTO, Tadimitsu, "Interleukin-6 and its Receptor in Autoimmunity," <i>Journal of Autoimmunity</i> , 1992, 5(Suppl. A):123-132.	
	E30	KITANI et al., "Autostimulatory effects of IL-6 on excessive B cell differentiation in patients with systemic lupus erythematosus: analysis of IL-6 production and IL-6R expression," <i>Clin. Exp. Immunol.</i> , 1992, 88:75-83.	

<b>Examiner Signature</b>	/Prema Mertz/	<b>Date Considered</b>	09/08/2009
---------------------------	---------------	------------------------	------------

\*EXAMINER: Initial if reference considered; whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		<b>Application Number</b>	10/677,227
Date Submitted: April 1, 2009		<b>Filing Date</b>	10/3/2003
(use as many sheets as necessary)		<b>First Named Inventor</b>	Hiroaki ITO
		<b>Art Unit</b>	1646
		<b>Examiner Name</b>	Prema Maria MERTZ
<b>Sheet</b>	3 of 3	<b>Attorney Docket Number</b>	053466-0365

## NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>
	E31	KUSUGAMI et al., "Elevation of Interleukin-6 in Inflammatory Bowel Disease is Macrophage- and Epithelial Cell-Dependent," Digestive Diseases and Sciences, May 1995, 40(5):949-959.	
	E32	NAGAFUCHI et al., "Constitutive Expression of IL-6 Receptors and Their Role in the Excessive B Cell Function in Patients with Systemic Lupus Erythematosus," J. Immunol., December 1, 1993, 151(11):6525-6534.	
	E33	STEVENS et al., "Tumor Necrosis Factor- $\alpha$ , Interleukin-1 $\beta$ , and Interleukin-6 Expression in Inflammatory Bowel Disease," Digestive Diseases and Sciences, June 1992, 37(6):818-826.	
	E34	SUZUKI et al., "Anti-murine IL-6 receptor antibody inhibits IL-6 effects in vivo," Immunology Letters, 1991, 30:17-22.	
	E35	VANDENABEELE et al., "Increased IL-6 Production and IL-6-Mediated Ig Secretion in Murine Host-vs-Graft Disease," J. Immunol., May 1, 1993, 150(9):4179-4187.	

<b>Examiner Signature</b>	/Prema Mertz/	<b>Date Considered</b>	09/08/2009
---------------------------	---------------	------------------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST 3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.